WHAT IS CLAIMED IS:

1. A programmable frequency scanning radio receiver comprising:

a receiver for receiving radio frequency transmissions at each of a plurality of

5 discrete frequencies;

a first communication device coupled to the frequency scanning radio receiver for

determining the geographical location of the frequency scanning radio receiver by

communication with a geographical positioning system;

a memory for storing frequency data, the frequency data including a plurality of

10 frequencies corresponding to respective transmitting parties of interest located within a

reception range of the geographical location of the frequency scanning radio receiver;

and

a processing circuit coupled to the memory, the receiver, and the first

communication device, accessing the memory, controlling the receiver and the

15 transmitter to operate only at the frequencies of the frequency data in the memory, and

controlling and receiving a determination of the geographical location of the transceiver

by the first communication device for updating the frequency data.

2. The programmable frequency scanning radio receiver according to claim 1

20 wherein the first communication device and the receiver are contained in a single

package.

3. The programmable frequency scanning radio receiver according to claim 1

wherein the first communication device and the receiver are contained in separate

25 packages.

4. The programmable frequency scanning radio receiver according to claim 1

including a data base of frequency allocations and geographical location information

corresponding to the frequency allocations, internal to the frequency scanning radio

30 receiver, wherein the processing circuit, in response to a determination of geographical

position of the frequency scanning radio receiver through the first communication device, accesses the data base, selects frequency allocations for the geographical location of the frequency scanning radio receiver, and stores the frequency allocations selected as the frequency data in the memory.

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5. The programmable frequency scanning radio receiver according to claim 4 wherein the processing circuit, in response to a request, determines distance between a current geographical location of the receiver determined through the first communication device and a geographical location determined through the first communication device at

10   last previous access of the data base and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum distance.

6. The programmable frequency scanning radio receiver according to claim 1 wherein the processing circuit, in response to a request, determines distance between a

15   current geographical location of the receiver determined through the first communication device and a geographical location determined through the first communication device at last previous access of a data base of frequency allocation and geographical location information corresponding to the frequency allocations, and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum

20   distance.

7. The programmable frequency scanning radio receiver according to claim 1 comprising an input device coupled to the processing circuit for manually entering a request for the first communication device to determine the geographical location of the

25   frequency scanning radio receiver.

8. The programmable frequency scanning radio receiver according to claim 1 wherein the processing circuit automatically makes a request for determination of the geographical location of the frequency scanning radio receiver through the first

30   communication device based upon passage of time since the last request for

determination of geographical location.

9. The programmable frequency scanning radio receiver according to claim 1 comprising a second communication device coupled to the processing circuit for

5 communicating with a host system containing a data base of frequency allocation and geographical location information corresponding to the frequency allocations and located remotely from the receiver, supplying the geographical location of the frequency scanning radio receiver determined by the first communication device to the host system, and receiving the frequency allocations for the geographical location of the frequency

10 scanning radio receiver from the host system, the processing circuit storing the frequency allocations for the geographical location in the memory as the frequency data.

10. A programmable frequency scanning radio receiver comprising:

a receiver for receiving radio frequency transmissions at each of a plurality of

15 discrete frequencies;

a memory for storing frequency data, the frequency data including a plurality of frequencies corresponding to respective transmitting parties of interest located within a reception range of the geographical location of the frequency scanning radio receiver

a data base of frequency allocations and geographical location information

20 corresponding to the frequency allocations, internal to the frequency scanning radio receiver, for programming the frequency scanning radio receiver; and

a processing circuit coupled to the memory, the receiver, and the data base, assembling the frequency data from the data base, based on the geographical location of the frequency scanning radio receiver, storing in the memory the frequency data

25 assembled from the data base, and controlling the receiver to monitor transmissions only at the frequencies of the frequency data in the memory.

11. A method of automatically programming a frequency scanning radio receiver to monitor transmissions only on programmed discrete frequencies comprising:

determining the geographical location of the frequency scanning radio receiver through a first communication device coupled to the frequency scanning radio receiver

5   by communicating with a geographical positioning system

in response to the geographical location determination, assembling frequency data from a data base including frequency allocations and geographical location information corresponding to the frequency allocations for locations proximate the geographical location of the frequency scanning radio receiver, determined through the

10   first communication device;

supplying the frequency data from the data base to a memory in the frequency scanning radio receiver; and

in response to the frequency data received from the data base, programming the frequency scanning radio receiver to monitor transmissions only on operating

15   frequencies of the frequency data.

12. The method of claim 11 wherein the data base is internal to the frequency scanning radio receiver and including assembling the frequency data with a search engine within the frequency scanning radio receiver.

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13. The method of claim 11 wherein the data base is located in a host system remote from the frequency scanning radio receiver and including sending a programming request to the host system through a second communication device internal to the frequency scanning radio receiver, and receiving the frequency data from the host system

25   through the second communication device, the frequency data being assembled in the host system.

14. The method of claim 11 including manually requesting the first communication device to determine the geographical location of the frequency scanning

30   radio receiver.

15. The method of claim 11 including automatically determining the geographical location of the frequency scanning radio receiver through the first communication device at respective time intervals.

5   16. The method of claim 11 including, in response to a determination of current geographical location of the frequency scanning radio receiver, determining distance between the current geographical location and the geographical location since last access of the data base, and assembling the frequency data only if the distance exceeds a minimum distance.

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17. A programmable transceiver comprising:

a receiver for receiving radio frequency transmissions at each of a plurality of discrete frequencies;

a transmitter for transmitting radio frequency transmissions at each of a plurality

15 of discrete frequencies;

a first communication device coupled to the transceiver for determining the geographical location of the transceiver by communication with a geographical positioning system;

a memory for storing frequency data, the frequency data including a plurality of

20 frequencies corresponding to respective transmitting and receiving parties of interest located within a reception and transmission range of the geographical location of the transceiver; and

a processing circuit coupled to the memory, the receiver, the transmitter, and the first communication device, accessing the memory, controlling the receiver and the

25 transmitter to operate only at the frequencies of the frequency data in the memory, and controlling and receiving a determination of the geographical location of the transceiver by the first communication device for updating the frequency data.

18. The programmable transceiver according to claim 17 wherein the first

30 communication device and the transceiver are contained in a single package.

19. The programmable frequency scanning radio receiver according to claim 17 wherein the first communication device and the transceiver are contained in separate packages.

5   20. The programmable transceiver according to claim 17 including a data base of frequency allocations, and geographical location information corresponding to the frequency allocations internal to the transceiver, wherein the processing circuit, in response to a determination of geographical position of the transceiver through the first communication device, accesses the data base, selects frequency allocations for the

10   geographical location of the transceiver, and stores the frequency allocations selected as the frequency data in the memory.

21. The programmable transceiver according to claim 20 wherein the processing circuit, in response to a request, determines distance between a current geographical

15   location of the receiver determined through the first communication device and a geographical location determined through the first communication device at last previous access of the data base and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum distance.

20   22. The programmable transceiver according to claim 17 wherein the processing circuit, in response to a request, determines distance between a current geographical location of the transceiver determined through the first communication device and a geographical location determined through the first communication device at last previous access of a data base of frequency allocation and geographical location information

25   corresponding to the frequency allocations, and only accesses the data base to update the frequency data stored in the memory if the distance exceeds a minimum distance.

23. The programmable transceiver according to claim 17 comprising an input device coupled to the processing circuit for manually entering a request for the first

30   communication device to determine the geographical location of the transceiver.

24. The programmable transceiver according to claim 17 wherein the processing circuit automatically makes a request for determination of the geographical location of the transceiver through the first communication device based upon passage of time since the last request for determination of geographical location.

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25. The programmable transceiver according to claim 17 comprising a second communication device coupled to the processing circuit for communicating with a host system containing a data base of frequency allocation and geographical location information corresponding to the frequency allocations and located remotely from the transceiver, supplying the geographical location of the transceiver determined by the first communication device to the host system, and receiving the frequency allocations for the geographical location of the transceiver from the host system, the processing circuit storing the frequency allocations for the geographical location in the memory as the frequency data.

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26. A programmable transceiver comprising:

a receiver for receiving radio frequency transmissions at each of a plurality of discrete frequencies;

a transmitter for transmitting radio frequency transmission at each of a plurality of discrete frequencies;

a memory for storing frequency data, the frequency data including a plurality of frequencies corresponding to respective transmitting and receiving parties of interest located within a reception and transmission range of the geographical location of the transceiver;

a data base of frequency allocations and geographical location information corresponding to the frequency allocations, internal to the transceiver, for programming the transceiver; and

a processing circuit coupled to the memory, the receiver, the transmitter, and the data base, assembling the frequency data from the data base, based on the geographical location of the transceiver, storing in the memory the frequency data assembled from the

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data base, and controlling the receiver and the transmitter to operate only at the frequencies of the frequency data in the memory.

27. A method of automatically programming a transceiver to operate only on
5   programmed discrete frequencies comprising:

determining the geographical location of the transceiver through a first communication device coupled to the transceiver by communicating with a geographical positioning system;

in response to the geographical location determination, assembling frequency
10 data from a data base including frequency allocations and geographical location information corresponding to the frequency allocations for locations proximate the geographical location of the transceiver determined through the first communication device;

supplying the frequency data from the data base to a memory in the transceiver;
15 and

in response to the frequency data received from the data base, programming the transceiver to operate only on operating frequencies of the frequency data.

28. The method of claim 27 wherein the data base is internal to the transceiver
20 and including assembling the frequency data with a search engine within the transceiver.

29. The method of claim 27 wherein the data base is located in a host system remote from the transceiver and including sending a programming request to the host system through a second communication device internal to the transceiver, and receiving
25 the frequency data from the host system through the second communication device, the frequency data being assembled in the host system.

30. The method of claim 27 including manually requesting the first communication device to determine the geographical location of the transceiver.
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31. The method of claim 27 including automatically determining the geographical location of the transceiver through the first communication device at respective time intervals.

5   32. The method of claim 27 including, in response to a determination of current geographical location of the transceiver, determining distance between the current geographical location and the geographical location since last access of the data base, and assembling the frequency data only if the distance exceeds a minimum distance.

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